HPV Vaccine Q & A

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CDC

What is HPV?

HPV stands for human papilloma (pap-ah-LO-mah) virus. HPV is a very common virus. It is passed on through genital contact, most often during vaginal and anal sex.

HPV is not a new virus, but we are learning more about it.

HPV is NOT the same as HIV or herpes virus (HSV). While these are all viruses that can be sexually transmitted— HIV and HSV do not cause the same symptoms or health problems as HPV.

What are the symptoms and effects of HPV?

There are many different types of HPV that can infect the genital area of men and women. Most HPV types cause no symptoms and go away on their own. But some types of HPV can cause cervical cancer in women. These types also have been linked to other less common genital cancers, including cancers of the anus, vagina, and vulva (area around the opening of the vagina). Other types of HPV can cause warts in the genital areas of men and women, called genital warts. However, most people who get HPV do not develop these health problems.

What is the cervix?

The cervix is the lower part of a woman's uterus (womb). It is one of the female organs.

How is HPV related to cervical cancer?

Some types of HPV can infect a woman's cervix and cause the cells to change. Most of the time, HPV goes away on its own. When HPV is gone, the cervix cells go back to normal.

But sometimes, HPV does not go away. Instead, it lingers (persists) and continues to change the cells on a woman's cervix. These cell changes can lead to cancer over time, if they are not treated.

Can cervical cancer be prevented?

Regular cervical cancer screening (Pap tests) and follow-up can prevent most, but not all, cases of cervical cancer. Pap tests can detect cell changes (or "precancers") in the cervix before they turn into cancer. Pap tests can also detect most, but not all, cervical cancers at an early, curable stage. Most women diagnosed with cervical cancer in the U.S. have never had a Pap test, or haven't had a Pap test in five or more years.

How common is cervical cancer in the U.S.? How many women die from it?

The American Cancer Society estimates that in 2006, over 9,700 women will be diagnosed with cervical cancer and 3,700 women will die from this cancer in the U.S.

How common are genital warts?

About 1% of sexually active adults in the U.S. (about 1 million people) have visible genital warts at any point in time.

How common is HPV?

At least 50% of sexually active people will get HPV at some time in their lives. Every year in the U.S., about 6.2 million people get HPV. HPV is most common in young women and men who are in their late teens and early 20s.

Who can get HPV?

Anyone who has ever had genital contact with another person can get HPV. Both men and women can get it – and pass it on to their sex partners- without even realizing it.

Can HPV be treated?

There is no treatment for HPV. But there are treatments for the health problems that HPV can cause, such as genital warts, cervical cell changes, and cancers of the cervix, vulva, vagina and anus.

Can HPV be prevented?

The only sure way to prevent HPV is to abstain from all sexual activity. Even persons with only one lifetime sex partner can get HPV, if their partner has had previous partners.

It is not known how much protection condoms provide against HPV, since areas that are not covered by a condom can be exposed to the virus. However, condoms may reduce the risk of genital warts and cervical cancer. They can also reduce the risk of HIV and some other sexually transmitted infections (STIs), when used all the time and the right way.

Is there a vaccine to prevent cervical cancer and genital warts?

On June 8, 2006, an HPV vaccine (manufactured by Merck) was licensed by the Food and Drug Administration (FDA) for use in females, ages 9-26 years. This vaccine protects against four types of HPV, including two that cause most (70%) cervical cancers (types 16, 18), and two that cause most (90%) genital warts (types 6, 11). The vaccine is given through a series of three injections over a six-month period. The second and third doses should be given two and six months (respectively) after the first dose.

Another HPV vaccine (being developed by GlaxoSmithKline) is in the final stages of clinical testing, but it is not yet licensed. This vaccine would protect against the two types of HPV that cause most cervical cancers.

How effective is the FDA-approved vaccine?

The licensed vaccine has been found to be 100% effective in preventing cervical precancers caused by the targeted HPV types. It has also been found to be almost 100% effective in preventing precancers of the vulva and vagina, and genital warts that are caused by the targeted HPV types.

How long does vaccine protection last? Will a booster shot be needed?

The length of vaccine protection (immunity) is usually not known when a vaccine is first introduced. So far, studies have found that vaccinated persons are protected for five years. More research is being done to find out how long protection will last, and if a booster vaccine is needed years later.

Is the HPV vaccine safe?

Before any vaccine is licensed and made available to the American public, the FDA must approve it as safe and effective. This HPV vaccine has already been tested in over 11,000 females (ages 9-26 years) in many countries around the world. Testing has recently begun in boys (ages 9-15) as well. There appear to be no serious side effects. The most common side effect is brief soreness at the injection site.

Does the vaccine contain thimerosal or mercury?

No, there is no thimerosal or mercury in the vaccine. This vaccine is made up of proteins from the outer coat of the virus (HPV). There is no infectious material in the vaccine.

What will the vaccines *not* protect against?

Because the vaccine will not protect against all types of HPV, it will not prevent all cases of cervical cancer or genital warts. About 30% of cervical cancers will not be prevented by the vaccine, so it will be important for women to continue getting screened for cervical cancer (regular Pap tests). Also, the vaccine will not prevent about 10% of genital warts—nor will it prevent other STIs— so it will still be important for sexually active adults to reduce exposure to HPV and other STIs.

Why is the vaccine only licensed for girls ages 9-26?

Since the vaccine was only tested in 9-26 year-old females, we only have information about vaccine safety and effectiveness for females of this age group. The FDA will consider licensure of the vaccine for other groups when there is research to show that it is safe and effective in those groups. Studies are now being done in boys/men, as well as in older women.

Who could benefit from the vaccine?

Ideally, the vaccine would be administered before females become sexually active—since this vaccine is most effective in females who have not yet acquired HPV infection. However, females who are sexually active may also benefit from the vaccine. Those who have not been infected with any vaccine HPV type would get the full benefits of the vaccine. Those who have already been infected with one or more HPV type would still get protection from the vaccine types they have not yet acquired. Few young women are infected with all four vaccine HPV types (6,11,16,18).

We do not yet know if males can also benefit from this vaccine. Studies are now being done to find out if the vaccine works to prevent HPV infection and disease in males.

How are vaccine recommendations made?

Once a vaccine is licensed by the FDA, the federal Advisory Committee on Immunization Practices (ACIP) votes on whether to recommend this vaccine, and if so, who should get it and at what ages. Neither the ACIP nor the federal government makes mandates or laws requiring immunization for children or adults. Rather, individual states decide if the vaccine should be required for certain populations (such as school entry laws). These laws vary from state to state.

When will the ACIP provide recommendations on the FDA-approved vaccine?

The ACIP is meeting on June 29, 2006, to consider recommendations for use of the FDA-approved vaccine.

What are the proposed recommendations being considered by the ACIP?

The proposed recommendations are to provide routine vaccination for 11-12 year-old girls and catch-up vaccination for 13-26 year-old females. For more information about the proposed ACIP recommendations and the upcoming ACIP meeting, visit www.cdc.gov/nip/acip/.

Will girls/women who have been vaccinated still need cervical cancer screening?

Yes. There are two reasons why women will still need regular cervical cancer screening. First, the vaccine will NOT provide protection against all types of HPV that cause cervical cancer, so women will still be at risk for some cancers. Second, some women may not get all required doses of the vaccine (or they may not get them at the right times), so they may not get the vaccine's full effects.

Cervical cancer screening guidelines for vaccinated women have not been changed.

How much will the HPV vaccine cost? Will it be covered by insurance plans?

The retail price of the vaccine is $120 per dose ($360 for full series). Insurance companies usually cover the costs of recommended vaccines. However, while some insurance companies may cover the vaccine, others may not.

What kind of government programs may be available to cover HPV vaccine?

Federal health programs such as Vaccines for Children (VFC) will cover the HPV vaccine, if the ACIP includes it in the VFC program. The VFC program provides free vaccines to children and adolescents under 19 years of age, who are either uninsured, Medicaid-eligible, American Indian, or Alaska Native. There are over 45,000 sites that provide VFC vaccines, including hospital, private, and public clinics. The VFC Program also allows children and adolescents to get VFC vaccines through Federally Qualified Health Centers or Rural Health Centers, if their private health insurance does not cover the vaccine. For more information about the VFC, visit www.cdc.gov/nip/vfc/Default.htm

Some states also provide free or low-cost vaccines at public health department clinics to people without health insurance coverage for vaccines.

Where can I get more information?

CDC HPV Information - http://www.cdc.gov/std/hpv/
Order Publications at http://www.cdc.gov/std/pubs/
STD information and referrals to STD Clinics
CDC-INFO
1-800-CDC-INFO (800-232-4636)
TTY: 1-888-232-6348
In English, en Español
American Cancer Society (ACS) - http://www.cancer.org
American Social Health Association (ASHA) - www.ashastd.org
P. O. Box 13827
Research Triangle Park, NC 27709-3827
1-800-783-9877

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